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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,451	10/21/2003	Michael C. Sherman	4002-3274	3728

30565 7590 04/05/2007
WOODARD, EMHARDT, MORIARTY, MCNETT & HENRY LLP
111 MONUMENT CIRCLE, SUITE 3700
INDIANAPOLIS, IN 46204-5137

EXAMINER

SWIGER III, JAMES L

ART UNIT	PAPER NUMBER
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3733

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/690,451

Applicant(s)

SHERMAN ET AL.

Examiner

James L. Swiger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32, 35-39 and 47-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32, 35-39 and 47-62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/29/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Claim Objections

Claim 47 is objected to because of the following informalities: In line 12, it is suggested to change "configure" to --configured--. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13, 15-34, and 36-39, and 47-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen (US Patent 6,206,882) in view of Tune (US Patent 4,905,680) and Tormala et al. (US Patent 4,655,203). Cohen discloses an orthopedic device for securing bones comprising an elongate member portion (10), that is capable of allowing translational or rotational movement due to the slits, also considered voids, which enable the member to move relative to the bones. The plate is secured at a first and second ends (at 22b and 22a, for example) at the bone site and then the elongated portion can move proportionally to the bones that are attached. See also Fig. 2 for drawing of device. The device also has reinforcement member (see Fig. 6) that, when used in combination with an appropriate plate embodiment and bone anchor would be capable of reinforcing the attachment of the device to two bone portions. The device is also made of a biocompatible material (see col. 3, lines 25-40) and has opposing end portions for a first and second end. The art also discloses that the design of the

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elongated engagement device can adjust and provide a degree of 'elasticity.'

Depending on how the plate is used, a first portion could have a certain degree of resistance to deformation, as opposed to the other end. In addition, one end of the plate may be considered to have voids, while a portion of the opposing end of the plate could be considered to have none, such as the area that is closer to the bone fastener areas. It is also noted that Cohen would disclose performing the method of attaching to at least two bone portions.

Cohen discloses the claimed invention except for a plate with voids that have a reinforcing component that may be resorbable. Tune has reinforcing portions in light of the same interpretation of Cohen (27) that teaches a material that is an absorbable polymer (see Col. 2, lines 15-30). It would have been obvious at the time the invention was made to construct the device of Cohen having at least a resorbable polymer in view of Tune to better use the device for fixation of the spine as it heals.

The combination of Cohen and Tune disclose the claimed invention except for, more specifically, an elongate member also being an orthopedic rod. Tormala et al. disclose a bone device that has a more plate-like portion, but also disclose rod-like (8) embodiments. These would modify the device of Cohen with regards to the shape. Also, tormala et al. teaches that the invention has various properties that enable it to be absorbed as it is absorbed, thus based on the specific biocompatible element, it would meet more specific time constraints for absorption as required by the claims. (Col. 3, lines 35-65). It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Cohen and Tune having at least

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a rod-like member with more specific absorption rates in view of Tormala et al. to better use the invention.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Cohen '882 and Tune '680 and Tormala et al. '203 as applied to claim 1 above, and further in view of Alexander et al. (US patent 4,512,038). The combination of Cohen '882 and Tune '680 and Tormala et al. '203 disclose the claimed invention except for more specifically a reinforcing material that could be disposed in the voids themselves. Alexander et al. discloses a bio-absorbable composite tissue that is made of a biodegradable material (see Fig. 3) that may be placed in the said voids and is biodegradable over time (Col. 3, lines 29-41). As it reabsorbs into the body, it would cause less positive force or maintaining bone restriction. Also, the rate at which the material would absorb would also affect the mass that is left. Thus the mass rate is adjustable as well (Col. 3, lines 55-61). It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of the combination of Cohen '882 and Tune '680 and Tormala et al. '203 having a material that is capable of fitting into the voids and assimilating at a certain rate in view of Alexander et al. to better use the device to secure bone.

Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen '882 and Tune '680 and Tormala et al. '203 as applied to claim 24 above, and further in view of Burton (US Patent 4,743,260). The combination of Cohen '882 and Tune '680 and Tormala et al. '203 disclose the claimed invention except for a hollow orthopedic rod with reinforcing material. Burton discloses a rod with a hollow interior (18a) that may

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have a reinforcing material inside for support (see Col. 4, lines 21-27). It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Cohen '882 and Tune '680 and Tormala et al. '203 having at least a hollow rod in view of Burton to better use the device.

Response to Arguments

Applicant's arguments with respect to claims 1-32, 35-39, and 47-62 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

The indicated allowability of claim 47 is withdrawn in view of the newly discovered reference(s) to Cohen '882 and Tormala et al. '203. Rejections based on the newly cited reference(s) follow.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See '892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James L. Swiger whose telephone number is 571-272-5557. The examiner can normally be reached on Monday through Friday, 9:00am to 5:30pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


JLS

3/31/07


EDUARDO C. ROBERT
SUPERVISORY PATENT EXAMINER